A broader view on phonological change in a Limburgian dialect

It is generally acknowledged that the study of dialects and phonological theory can benefit from each others results. Van Oostendorp (2000) for instance illustrates the relevance of (Dutch) dialects for the development of phonological theories, mainly with respect to Optimality Theory (Prince and Smolensky 1993), and Taeldeman (2003) discusses some phonological developments in the southern Dutch (Flemish) dialects that can hardly be analysed adequately within the framework of several more recent phonological theories. Dialect data thus can not only provide "substantial evidence for language variation and language change" (Hoppenbrouwers 1982), but also raise some interesting questions to be answered by phonological theory.

An intriguing example that has remained largely unnoticed in the existing literature is the development of long vowels in Zutendaal, a village in the Belgian province of Limburg. The present-day dialect of Zutendaal reveals a rather atypical difference in the degree of openness between the descendants of West Germanic ô and its umlaut, compare for instance Zutendaal [vuːt] 'foot' – [veːt] 'feet' with e.g. Bilzen [vuːt] – [viːt] or Bree [voːt] – [veːt]. In order to explain this opposition, it is necessary to take a closer look at the whole system of long vowels in Zutendaal. Whereas historic data enable a reconstruction of the different stages in the development, phonological theory can elucidate these stages against the background of more general principles of linguistic change.

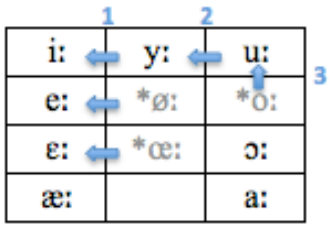
To begin with, Zutendaal belongs, or rather belonged, to the eastern Limburgian dialects that preserved West Germanic î - ŷ - û as [iː] - [yː] - [uː], e.g. [iːs] 'ice' - [kryːs] 'cross' - [huːs] 'house'. Furthermore, it is also part of a small area in central Belgian Limburg where all rounded front vowels were unrounded and systematically merged with their unrounded counterparts, e.g. Zutendaal *[kryːs] 'cross' developed to [kriːs] 'cross' (with the same vowel as [iːs] 'ice'). Due to this development, the initial rounded front vowels [y(ː)], [ø(ː)], [œ(ː)] and the diphthong [œy] no longer figure(d) in these dialects. At present, Zutendaal [œː] is only attested in the interjection [œː] 'erm', in [nœː] '(weakened) no' and in the exclamation [pœː] 'pfew' and Zutendaal [øː] is restricted to foreign words or suffixes as *-eur*, e.g. [amətøːr] 'amateur'. This must once also have been so for Zutendaal [yː], cf. the development of *[kryːs] to [kriːs] 'cross'.

In a later stage, however, all high or closed back vowels ([u], [uː], [œy]) were fronted (to [y], [yː], [ɛi]), e.g. [pys] 'cat', [hyːs] 'house', [hɛis] 'houses' (instead of older *[pus], *[huːs], *[hœys]). Goossens (1956: 100) already considers Zutendaal as one of the places where the fronting of [uː] to [ʉː], [yː] has made the most progress and thanks to a discussion between Kloeke and Leenen, it is also possible to determine a date post quem this change must have taken place. As it happens, Kloeke (1927: 56) mentions that he did not visit Zutendaal himself, but relies on spokesmen of neighbouring villages to put forward Zutendaal [mɔws] for 'mouse', which nevertheless was soon corrected by Leenen into [muːs] 'mouse' (Kloeke & Leenen 1929: 71). The fronting of West Germanic û ([uː]) to [yː] in Zutendaal thus must have taken place in the second quarter of the twentieth century.

From a theoretical point of view, this fronting corresponds to e.g. Labovs (1994: 116) third principle of linguistic change: "in chain shifts, back vowels move to the front". Furthermore, the fronting of back vowels can be seen as a 'natural tendency' within the framework of *(Natural) Generative Phonology* or as the result of an optimal ranking of constraints within *Optimality Theory*.

In a final stage so far, the long mid vowel [oː] in the dialect of Zutendaal rose to the empty position of [uː], e.g. [vuːt] ‘foot’, [buːk] ‘book’. Its umlaut [eː] could not join the upward movement to [iː], since that position was (and still is) occupied by the descendants of West Germanic î and ŷ, e.g. respectively [iːs] ‘ice’ and [kriːs] ‘cross’. In questionnaires sent out between 1922 and 1956 by the former ‘Zuidnederlandse Dialectcentrale’ of the University of Leuven or in the *Reeks Nederlandse Dialectatlassen* (Blancquaert et. al. 1962: 285-288) there still is no sign of this development, e.g. [ɣoːt] ‘good’, [hoːt] ‘hat’ or [bloːt] ‘blood’, which at present all have [uː] in the dialect of Zutendaal. Although this is to the best of our knowledge a unique development in the landscape of the Limburgian dialects and has not been described before, phonological theory can once again easily account for this development by means of another general principle that governs the chain shifting of sounds: “in chain shift, long vowels rise” (Labov 1994: 116).

It is clear that dialect data can both illustrate and provide evidence for more natural or universal principles of linguistic change. The development of the system of long vowels in the dialect of Zutendaal for instance is a clear example of change in progress and reveals a drag or pull chain. The empty position in the vowel system that was created after the unrounding of [yː] and the subsequent fronting of [uː] was filled by an upward movement of [oː], which in turn leaves behind an empty position. This immediately raises the question whether the chain shift will move on, i.e. that present [ɔː] (and [aː]) will also rise or on the contrary rather remain stable?



From a mere internal point of view it is to be expected that the other back vowels will eventually also participate in the chain shift and move upward. Nevertheless, there are some external factors that might prevent such a development. It will be shown that these are worth considering and that the rise of [oː] has moreover upset the parallellism between the system of short and long vowels in the dialect of Zutendaal, for short [o] did not rise.

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